# 1979

# Capital Investments of the World Petroleum Industry

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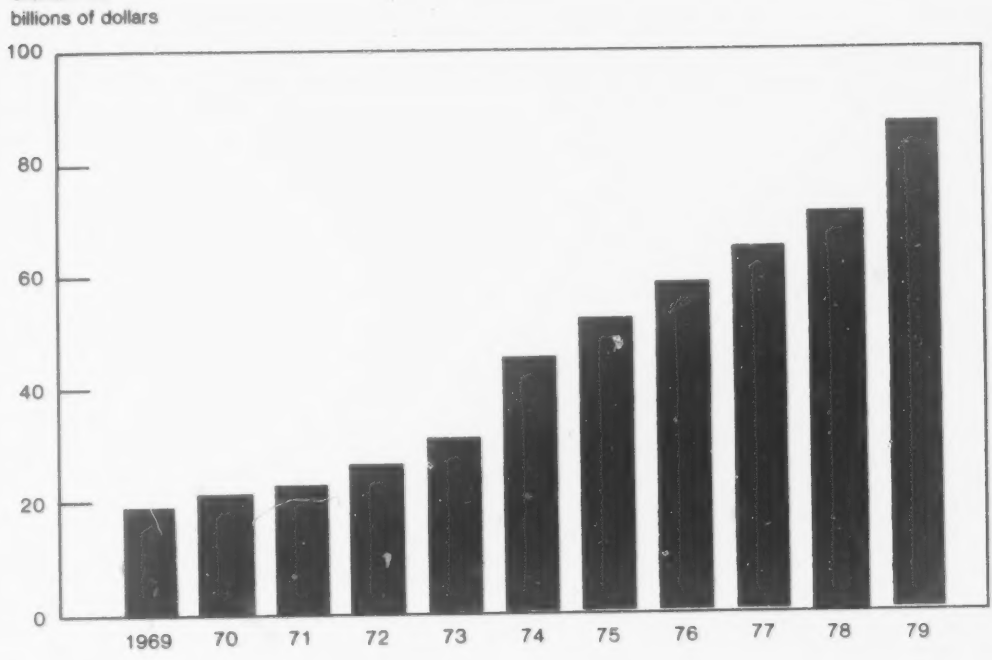
# FOREWORD

For many years the Energy Economics Division of The Chase Manhattan Bank has conducted a continuous and detailed study of the financial performance of a large number of petroleum companies. The combined operations of these organizations constitute a major proportion of the worldwide activities of the petroleum industry, and their financial performance, therefore, is a significant indication of the probable experience of the overall industry.

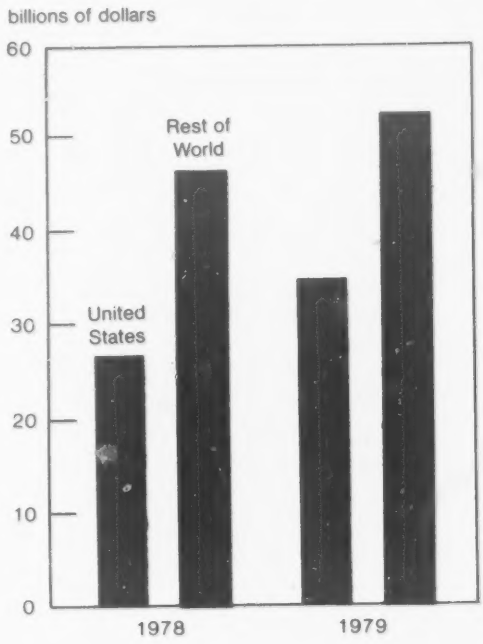
Additional data have been obtained from surveys of a great many investor and other government owned operating entities, and the sum of all the information gained has provided a base from which we have derived a reliable estimate of the worldwide capital investments of the petroleum industry.

## CAPITAL AND EXPLORATION EXPENDITURES

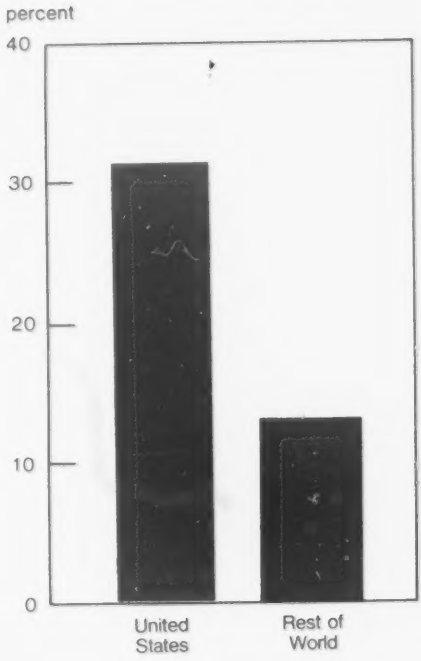
**Worldwide**




**United States and Rest of World**




**Change from 1978**



# Highlights of CAPITAL EXPENDITURES IN 1979

**Worldwide Capital and Exploration Expenditures**

- During 1979, capital and exploration expenditures of the petroleum industry in the non-Communist world increased by $14.5 billion, or 20% over the prior year, to $87 billion. This increase was well above the general level of price inflation in the industrialized countries, where most of the change took place, and it represents a distinct departure from the 14% average annual growth rate experienced between 1968 and 1978.

- Well over half of the $14.5 billion worldwide increase occurred in the United States, where investments, led by a sharp upturn in drilling activity, rose by 32% to $34.8 billion.

- In the rest of the world, where capital expenditure increases in production, refineries, chemical plants, and marketing were partially offset by declines in pipelines and tankers, total expenditures increased by 13% to $52.2 billion.

## Regional or Geographic Breakdown

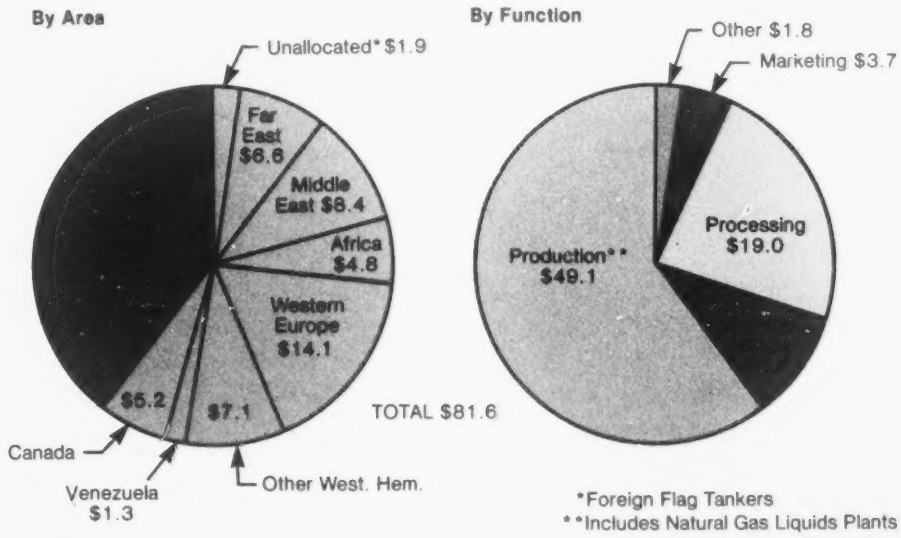
- Geographically, all regions registered capital spending gains ranging from 3% for Africa to nearly 23% for Canada and the Far East, to 35% for Venezuela.

- Principally because of continuing exploration and development activities in the North Sea, Western Europe's $14.6 billion investment maintained its position as the second most capital-intensive region in the world next to the United States. The Mid-East remained a distant third at $8.6 billion.

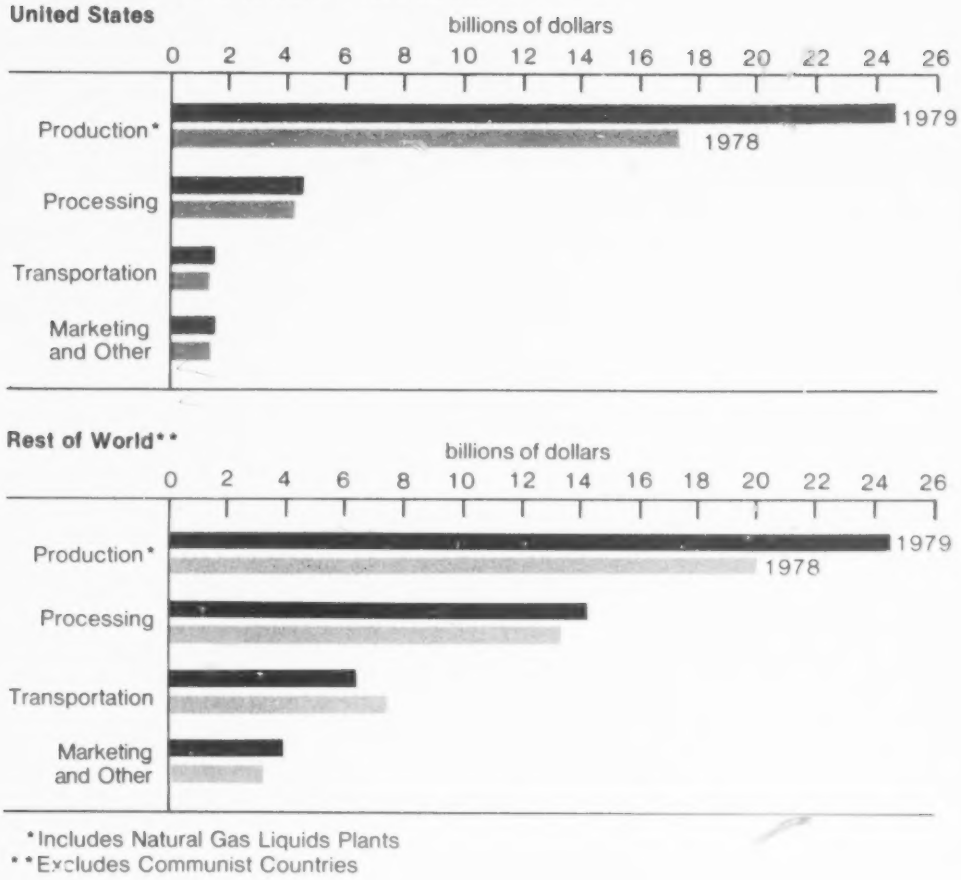
- Together, the United States and Western Europe accounted for 57% of the worldwide investment in petroleum, up from 54% in 1978 and above the previous five-year average which was also 54%.

**WORLDWIDE CAPITAL EXPENDITURES — 1979**

billions of dollars



**WORLDWIDE CAPITAL EXPENDITURES**
**BREAKDOWN BY FUNCTION — 1979 vs. 1978**




*Includes Natural Gas Liquids Plants
**Excludes Communist Countries

## All Functions

- Investments in all functional activities increased, except for the transportation segment, made up of pipelines and tankers, which registered declines for the third consecutive year.

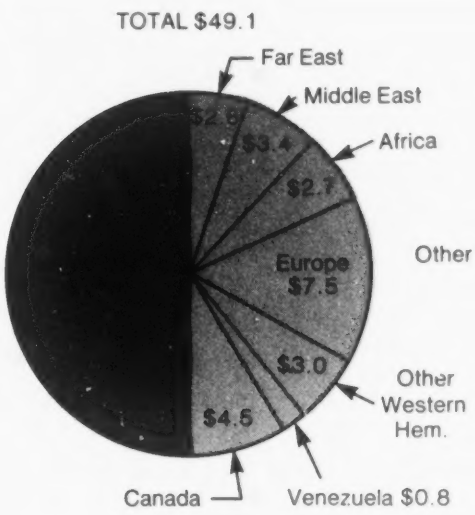
- Tempered by the beginning of uncertainty over future product demand after a sharp first-half run-up in crude prices, downstream investments for refineries, chemical plants, and marketing facilities rose only moderately by 10.3%, 8.8% and 15.7%, respectively.

- The $11.4 billion increase in worldwide production expenditures to $49.1 billion was by far the largest year-to-year increase ever recorded, substantially exceeding the record increase of $6.7 billion in 1977.

**CAPITAL EXPENDITURES — PRODUCTION**

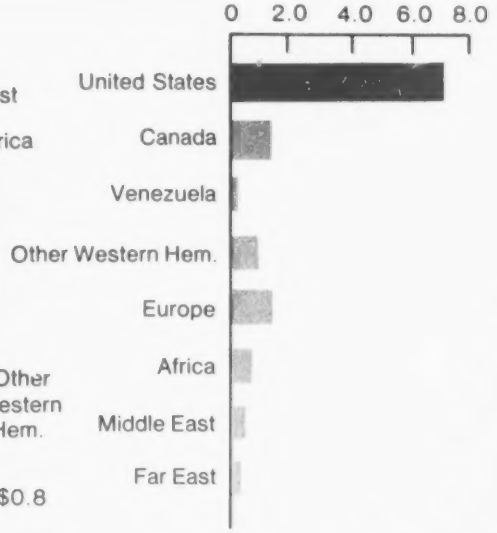
**Year 1979**

billions of dollars




**Change from 1978**

billions of dollars




## Production

- Dominating the industry's investment pattern during the year, production expenditures alone, including natural gas liquid plants, represented 56% of total spending for all purposes and accounted for 80% of the industry's increase in capital and exploration expenditures.

- Increases in production expenditures were registered in all regions of the world, ranging from 6% in the Far East to 39% in the United States.

- With sharply increasing world crude prices, 1979 production expenditures in the United States jumped by $6.9 billion to $24.6 billion. The United States accounted for one-half of the industry's worldwide production outlays and about 75 to 80% of worldwide footage drilled.

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*Photographs used in this report were furnished through the courtesy of Mobil Oil Corporation.*

## SCHEDULE 1 CAPITAL AND EXPLORATION EXPENDITURES Year 1979

| | United States | Canada | Venezuela |
|---|---|---|---|
| | Million Dollars | | |
| Crude Oil and Natural Gas | 24,150 | 4,300 | 800 |
| Natural Gas Liquids Plants | 450 | 225 | 15 |
| Total Production | 24,600 | 4,525 | 815 |
| Pipe Lines | 1,100 | 125 | 25 |
| Tankers | 350 | 0 | 0 |
| Refineries | 2,625 | 175 | 425 |
| Chemical Plants | 2,000 | 75 | 10 |
| Marketing | 975 | 150 | 25 |
| Other | 550 | 150 | 25 |
| *Total Capital Expenditures* | 32,200 | 5,200 | 1,325 |
| *Geological & Geophysical Expense and Lease Rentals* | 2,600 | 700 | 200 |
| *CAPITAL & EXPLORATION EXPENDITURES* | 34,800 | 5,900 | 1,525 |

## SCHEDULE 2 GROSS INVESTMENT IN FIXED ASSETS December 31, 1979

| | | | |
|---|---|---|---|
| Crude Oil and Natural Gas | 115,500 | 18,450 | 6,900 |
| Natural Gas Liquids Plants | 5,050 | 1,900 | 335 |
| Total Production | 120,550 | 20,350 | 7,235 |
| Pipe Lines | 19,050 | 1,980 | 550 |
| Tankers | 3,350 | 0 | 0 |
| Refineries | 24,000 | 4,250 | 1,400 |
| Chemical Plants | 18,215 | 900 | 10 |
| Marketing | 14,600 | 2,615 | 230 |
| Other | 4,470 | 660 | 185 |
| *TOTAL GROSS INVESTMENT* | 204,235 | 30,755 | 9,610 |

## SCHEDULE 3 NET INVESTMENT IN FIXED ASSETS December 31, 1979

| | | | |
|---|---|---|---|
| Crude Oil and Natural Gas | 75,620 | 15,290 | 2,100 |
| Natural Gas Liquids Plants | 2,155 | 1,300 | 145 |
| Total Production | 77,775 | 16,590 | 2,245 |
| Pipe Lines | 13,355 | 1,085 | 45 |
| Tankers | 1,880 | 0 | 0 |
| Refineries | 11,220 | 2,405 | 605 |
| Chemical Plants | 9,810 | 550 | 10 |
| Marketing | 6,935 | 1,415 | 90 |
| Other | 2,500 | 555 | 145 |
| *TOTAL NET INVESTMENT* | 123,475 | 22,600 | 3,140 |

| Other Western Hemisphere | Western Europe | Africa | Middle East | Far East | Unallocated | Free World |
|---|---|---|---|---|---|---|
| | | | Million Dollars | | | |
| 2,650 | 7,200 | 1,650 | 1,700 | 2,050 | 0 | 44,500 |
| 325 | 350 | 1,000 | 1,650 | 550 | 0 | 4,565 |
| 2,975 | 7,550 | 2,650 | 3,350 | 2,600 | 0 | 49,065 |
| 1,200 | 700 | 550 | 1,550 | 525 | 0 | 5,775 |
| 0 | 0 | 0 | 0 | 0 | 1,900 | 2,250 |
| 1,175 | 2,525 | 800 | 2,100 | 1,950 | 0 | 11,775 |
| 1,375 | 1,600 | 500 | 1,200 | 475 | 0 | 7,235 |
| 250 | 1,400 | 225 | 100 | 625 | 0 | 3,750 |
| 125 | 300 | 75 | 125 | 425 | 0 | 1,775 |
| 7,100 | 14,075 | 4,800 | 8,425 | 6,600 | 1,900 | 81,625 |
| 300 | 550 | 350 | 175 | 450 | 0 | 5,325 |
| 7,400 | 14,625 | 5,150 | 8,600 | 7,050 | 1,900 | 86,950 |
| 12,425 | 29,350 | 8,575 | 12,800 | 8,450 | 0 | 212,450 |
| 1,225 | 1,200 | 3,700 | 5,350 | 3,225 | 0 | 21,985 |
| 13,650 | 30,550 | 12,275 | 18,150 | 11,675 | 0 | 234,435 |
| 6,775 | 7,100 | 4,025 | 8,375 | 2,225 | 0 | 50,080 |
| 0 | 0 | 0 | 0 | 0 | 55,800 | 59,150 |
| 11,375 | 28,875 | 4,900 | 8,650 | 19,750 | 0 | 103,200 |
| 5,150 | 14,975 | 1,400 | 3,500 | 2,775 | 0 | 46,925 |
| 2,725 | 15,750 | 2,225 | 765 | 6,575 | 0 | 45,485 |
| 1,150 | 2,375 | 475 | 1,460 | 1,275 | 0 | 12,050 |
| 40,825 | 99,625 | 25,300 | 40,900 | 44,275 | 55,800 | 551,325 |
| 7,495 | 26,910 | 6,185 | 7,585 | 6,425 | 0 | 147,610 |
| 945 | 1,000 | 3,160 | 4,960 | 2,825 | 0 | 16,490 |
| 8,440 | 27,910 | 9,345 | 12,545 | 9,250 | 0 | 164,100 |
| 5,110 | 5,425 | 2,815 | 6,415 | 1,795 | 0 | 36,045 |
| 0 | 0 | 0 | 0 | 0 | 44,700 | 46,580 |
| 7,880 | 16,055 | 3,780 | 6,765 | 12,400 | 0 | 61,110 |
| 4,265 | 10,030 | 1,330 | 3,285 | 1,875 | 0 | 31,155 |
| 870 | 5,690 | 800 | 220 | 3,145 | 0 | 19,165 |
| 915 | 2,020 | 360 | 945 | 1,060 | 0 | 8,500 |
| 27,480 | 67,130 | 18,430 | 30,175 | 29,525 | 44,700 | 366,655 |

## SCHEDULE 4 CAPITAL AND EXPLORATION EXPENDITURES

| | 1969 | 1970 | 1971 | 1972 |
|---|---|---|---|---|
| | *Million Dollars* | | | |
| **WORLD** | | | | |
| Crude Oil and Natural Gas | 7,075 | 6,650 | 6,520 | 9,590 |
| Natural Gas Liquids Plants | 465 | 580 | 695 | 515 |
| Pipe Lines | 910 | 850 | 1,200 | 1,230 |
| Tankers | 2,050 | 2,575 | 2,875 | 3,775 |
| Refineries | 3,210 | 4,000 | 4,755 | 4,955 |
| Chemical Plants | 1,310 | 1,525 | 1,535 | 1,350 |
| Marketing | 2,805 | 3,220 | 3,380 | 2,825 |
| Other | 550 | 725 | 840 | 710 |
| *Total Capital Expenditures* | 18,375 | 20,125 | 21,800 | 24,950 |
| *Geological & Geophysical Expense and Lease Rentals* | 1,380 | 1,340 | 1,395 | 1,540 |
| *COMBINED* | 19,755 | 21,465 | 23,195 | 26,490 |
| **UNITED STATES** | | | | |
| Crude Oil and Natural Gas | 4,525 | 4,110 | 3,185 | 5,740 |
| Natural Gas Liquids Plants | 225 | 225 | 200 | 175 |
| Pipe Lines | 300 | 450 | 550 | 300 |
| Tankers | 100 | 100 | 125 | 125 |
| Refineries | 950 | 1,075 | 1,050 | 900 |
| Chemical Plants | 575 | 550 | 500 | 450 |
| Marketing | 1,250 | 1,450 | 1,350 | 1,100 |
| Other | 250 | 265 | 290 | 260 |
| *Total Capital Expenditures* | 8,175 | 8,225 | 7,250 | 9,050 |
| *Geological & Geophysical Expense and Lease Rentals* | 725 | 665 | 715 | 740 |
| *COMBINED* | 8,900 | 8,890 | 7,965 | 9,790 |
| **CANADA** | | | | |
| Crude Oil and Natural Gas | 675 | 650 | 725 | 850 |
| Natural Gas Liquids Plants | 75 | 165 | 150 | 100 |
| Pipe Lines | 50 | 35 | 75 | 60 |
| Refineries | 150 | 240 | 210 | 325 |
| Chemical Plants | 50 | 25 | 15 | 10 |
| Marketing | 150 | 160 | 150 | 150 |
| Other | 25 | 25 | 20 | 30 |
| *Total Capital Expenditures* | 1,175 | 1,300 | 1,345 | 1,525 |
| *Geological & Geophysical Expense and Lease Rentals* | 175 | 175 | 150 | 150 |
| *COMBINED* | 1,350 | 1,475 | 1,495 | 1,675 |

| 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|---|---|---|---|---|---|---|
| | | | *Million Dollars* | | | |
| 12,415 | 18,765 | 18,295 | 23,860 | 28,680 | 33,675 | 44,500 |
| 510 | 770 | 960 | 1,915 | 3,780 | 4,030 | 4,565 |
| 1,230 | 2,460 | 5,995 | 7,575 | 6,660 | 5,780 | 5,775 |
| 6,550 | 8,900 | 9,240 | 8,675 | 3,700 | 2,950 | 2,250 |
| 4,865 | 7,720 | 8,725 | 6,910 | 8,290 | 10,675 | 11,775 |
| 1,175 | 1,995 | 3,145 | 4,500 | 6,375 | 6,650 | 7,235 |
| 2,480 | 2,215 | 2,160 | 2,180 | 2,670 | 3,240 | 3,750 |
| 770 | 875 | 1,105 | 1,110 | 1,425 | 1,375 | 1,775 |
| 29,995 | 43,700 | 49,625 | 56,725 | 61,580 | 68,375 | 81,625 |
| 1,700 | 2,185 | 2,325 | 2,535 | 3,395 | 4,035 | 5,325 |
| 31,695 | 45,885 | 51,950 | 59,260 | 64,975 | 72,410 | 86,950 |
| 7,290 | 11,225 | 9,055 | 13,135 | 14,855 | 17,325 | 24,150 |
| 150 | 225 | 325 | 325 | 325 | 325 | 450 |
| 450 | 1,400 | 3,500 | 3,625 | 1,800 | 750 | 1,100 |
| 100 | 200 | 225 | 275 | 500 | 600 | 350 |
| 1,050 | 1,775 | 2,100 | 1,575 | 1,200 | 1,750 | 2,625 |
| 425 | 825 | 1,500 | 2,200 | 2,500 | 2,300 | 2,000 |
| 850 | 650 | 650 | 625 | 775 | 950 | 975 |
| 325 | 325 | 370 | 325 | 445 | 475 | 550 |
| 10,640 | 16,625 | 17,725 | 22,085 | 22,400 | 24,475 | 32,200 |
| 850 | 1,130 | 1,195 | 1,375 | 1,645 | 1,975 | 2,600 |
| 11,490 | 17,755 | 18,920 | 23,460 | 24,045 | 26,450 | 34,800 |
| 1,000 | 1,150 | 1,125 | 1,550 | 2,900 | 3,200 | 4,300 |
| 75 | 150 | 150 | 150 | 125 | 150 | 225 |
| 80 | 75 | 160 | 135 | 350 | 135 | 125 |
| 290 | 400 | 410 | 325 | 375 | 400 | 175 |
| 15 | 30 | 70 | 75 | 125 | 125 | 75 |
| 155 | 190 | 175 | 175 | 175 | 165 | 150 |
| 35 | 80 | 120 | 45 | 75 | 65 | 150 |
| 1,650 | 2,075 | 2,210 | 2,455 | 4,125 | 4,240 | 5,200 |
| 175 | 225 | 200 | 250 | 450 | 500 | 700 |
| 1,825 | 2,300 | 2,410 | 2,705 | 4,575 | 4,740 | 5,900 |

## SCHEDULE 4 CAPITAL AND EXPLORATION EXPENDITURES *(Continued)*

| | 1969 | 1970 | 1971 | 1972 |
|---|---|---|---|---|
| | *Million Dollars* | | | |
| **VENEZUELA** | | | | |
| Crude Oil and Natural Gas | 200 | 205 | 210 | 150 |
| Natural Gas Liquids Plants | 25 | 25 | 5 | 5 |
| Pipe Lines | 15 | 20 | 10 | 5 |
| Refineries | 95 | 35 | 45 | 30 |
| Chemical Plants | 0 | 0 | 0 | 0 |
| Marketing | 5 | 10 | 5 | 0 |
| Other | 0 | 5 | 5 | 5 |
| *Total Capital Expenditures* | 340 | 300 | 280 | 195 |
| *Geological & Geophysical Expense and Lease Rentals* | 20 | 15 | 30 | 25 |
| *COMBINED* | 360 | 315 | 310 | 220 |
| **OTHER WESTERN HEMISPHERE** | | | | |
| Crude Oil and Natural Gas | 325 | 360 | 525 | 550 |
| Natural Gas Liquids Plants | 10 | 10 | 5 | 0 |
| Pipe Lines | 125 | 60 | 220 | 175 |
| Refineries | 400 | 400 | 650 | 475 |
| Chemical Plants | 175 | 100 | 75 | 15 |
| Marketing | 100 | 100 | 150 | 125 |
| Other | 65 | 130 | 100 | 60 |
| *Total Capital Expenditures* | 1,200 | 1,160 | 1,725 | 1,400 |
| *Geological & Geophysical Expense and Lease Rentals* | 75 | 85 | 75 | 75 |
| *COMBINED* | 1,275 | 1,245 | 1,800 | 1,475 |
| **WESTERN EUROPE** | | | | |
| Crude Oil and Natural Gas | 250 | 300 | 500 | 650 |
| Natural Gas Liquids Plants | 25 | 50 | 75 | 50 |
| Pipe Lines | 75 | 75 | 150 | 400 |
| Refineries | 850 | 1,050 | 1,400 | 1,500 |
| Chemical Plants | 350 | 725 | 800 | 800 |
| Marketing | 825 | 900 | 1,000 | 825 |
| Other | 105 | 160 | 225 | 225 |
| *Total Capital Expenditures* | 2,480 | 3,260 | 4,150 | 4,450 |
| *Geological & Geophysical Expense and Lease Rentals* | 125 | 100 | 75 | 125 |
| *COMBINED* | 2,605 | 3,360 | 4,225 | 4,575 |

| 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|---|---|---|---|---|---|---|
| | | | *Million Dollars* | | | |
| 200 | 290 | 240 | 250 | 375 | 700 | 800 |
| 5 | 15 | 10 | 40 | 5 | 5 | 15 |
| 5 | 10 | 0 | 15 | 10 | 20 | 25 |
| 10 | 20 | 15 | 10 | 40 | 175 | 425 |
| 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 0 | 0 | 10 | 5 | 20 | 25 | 25 |
| 0 | 0 | 15 | 15 | 30 | 60 | 25 |
| 220 | 335 | 290 | 335 | 480 | 985 | 1,325 |
| 25 | 30 | 30 | 10 | 50 | 60 | 200 |
| 245 | 365 | 320 | 345 | 530 | 1,045 | 1,525 |
| 575 | 925 | 950 | 1,175 | 1,100 | 1,900 | 2,650 |
| 50 | 50 | 75 | 75 | 200 | 250 | 325 |
| 75 | 260 | 625 | 750 | 425 | 1,550 | 1,200 |
| 550 | 1,025 | 1,250 | 1,100 | 1,050 | 1,000 | 1,175 |
| 20 | 100 | 150 | 475 | 950 | 1,075 | 1,375 |
| 100 | 125 | 150 | 150 | 175 | 225 | 250 |
| 65 | 50 | 75 | 100 | 200 | 175 | 125 |
| 1,435 | 2,535 | 3,275 | 3,825 | 4,100 | 6,175 | 7,100 |
| 75 | 150 | 150 | 125 | 150 | 200 | 300 |
| 1,510 | 2,685 | 3,425 | 3,950 | 4,250 | 6,375 | 7,400 |
| 1,300 | 2,375 | 3,600 | 4,200 | 5,275 | 5,975 | 7,200 |
| 25 | 40 | 50 | 50 | 225 | 200 | 350 |
| 350 | 475 | 1,000 | 1,100 | 875 | 950 | 700 |
| 1,550 | 2,250 | 2,350 | 1,450 | 2,000 | 2,500 | 2,525 |
| 600 | 850 | 1,100 | 1,200 | 1,300 | 1,500 | 1,600 |
| 800 | 750 | 700 | 725 | 875 | 1,100 | 1,400 |
| 200 | 180 | 250 | 225 | 325 | 250 | 300 |
| 4,825 | 6,920 | 9,050 | 8,950 | 10,875 | 12,475 | 14,075 |
| 175 | 225 | 300 | 325 | 450 | 475 | 550 |
| 5,000 | 7,145 | 9,350 | 9,275 | 11,325 | 12,950 | 14,625 |

## SCHEDULE 4 CAPITAL AND EXPLORATION EXPENDITURES *(Continued)*

| | 1969 | 1970 | 1971 | 1972 |
|---|---|---|---|---|
| | *Million Dollars* | | | |
| **AFRICA** | | | | |
| Crude Oil and Natural Gas | 525 | 450 | 525 | 500 |
| Natural Gas Liquids Plants | 50 | 75 | 135 | 100 |
| Pipe Lines | 110 | 100 | 80 | 90 |
| Refineries | 90 | 85 | 100 | 200 |
| Chemical Plants | 0 | 0 | 5 | 0 |
| Marketing | 50 | 75 | 100 | 100 |
| Other | 0 | 5 | 30 | 15 |
| *Total Capital Expenditures* | 825 | 790 | 975 | 1,005 |
| *Geological & Geophysical Expense and Lease Rentals* | 85 | 100 | 150 | 175 |
| *COMBINED* | 910 | 890 | 1,125 | 1,180 |
| **MIDDLE EAST** | | | | |
| Crude Oil and Natural Gas | 325 | 275 | 450 | 500 |
| Natural Gas Liquids Plants | 5 | 5 | 25 | 10 |
| Pipe Lines | 210 | 75 | 65 | 140 |
| Refineries | 100 | 140 | 125 | 225 |
| Chemical Plants | 10 | 25 | 40 | 25 |
| Marketing | 25 | 25 | 25 | 25 |
| Other | 55 | 20 | 95 | 50 |
| *Total Capital Expenditures* | 730 | 565 | 825 | 975 |
| *Geological & Geophysical Expense and Lease Rentals* | 50 | 50 | 50 | 50 |
| *COMBINED* | 780 | 615 | 875 | 1,025 |
| **FAR EAST** | | | | |
| Crude Oil and Natural Gas | 250 | 300 | 400 | 650 |
| Natural Gas Liquids Plants | 50 | 25 | 100 | 75 |
| Pipe Lines | 25 | 35 | 50 | 60 |
| Refineries | 575 | 975 | 1,175 | 1,300 |
| Chemical Plants | 150 | 100 | 100 | 50 |
| Marketing | 400 | 500 | 600 | 500 |
| Other | 50 | 115 | 75 | 65 |
| *Total Capital Expenditures* | 1,500 | 2,050 | 2,500 | 2,700 |
| *Geological & Geophysical Expense and Lease Rentals* | 125 | 150 | 150 | 200 |
| *COMBINED* | 1,625 | 2,200 | 2,650 | 2,900 |
| **FOREIGN FLAG TANKERS** | 1,950 | 2,475 | 2,750 | 3,650 |

| 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|---|---|---|---|---|---|---|
| | | | *Million Dollars* | | | |
| 500 | 750 | 825 | 1,000 | 950 | 1,275 | 1,650 |
| 125 | 140 | 175 | 200 | 600 | 900 | 1,000 |
| 55 | 50 | 250 | 525 | 525 | 625 | 550 |
| 165 | 150 | 250 | 375 | 900 | 1,175 | 800 |
| 5 | 25 | 50 | 150 | 300 | 400 | 500 |
| 100 | 75 | 100 | 125 | 175 | 200 | 225 |
| 25 | 25 | 25 | 50 | 100 | 75 | 75 |
| 975 | 1,215 | 1,675 | 2,425 | 3,550 | 4,650 | 4,800 |
| 125 | 150 | 200 | 175 | 300 | 375 | 350 |
| 1,100 | 1,365 | 1,875 | 2,600 | 3,850 | 5,025 | 5,150 |
| 850 | 975 | 1,000 | 1,375 | 1,925 | 1,550 | 1,700 |
| 5 | 25 | 25 | 675 | 1,400 | 1,500 | 1,650 |
| 130 | 120 | 350 | 1,250 | 2,150 | 1,400 | 1,550 |
| 300 | 450 | 400 | 925 | 1,250 | 2,050 | 2,100 |
| 30 | 40 | 50 | 150 | 900 | 1,000 | 1,200 |
| 25 | 25 | 25 | 25 | 50 | 50 | 100 |
| 50 | 135 | 175 | 275 | 125 | 100 | 125 |
| 1,390 | 1,770 | 2,025 | 4,675 | 7,800 | 7,650 | 8,425 |
| 50 | 50 | 50 | 75 | 125 | 150 | 175 |
| 1,440 | 1,820 | 2,075 | 4,750 | 7,925 | 7,800 | 8,600 |
| 700 | 1,075 | 1,500 | 1,175 | 1,300 | 1,750 | 2,050 |
| 75 | 125 | 150 | 400 | 900 | 700 | 550 |
| 85 | 70 | 110 | 175 | 525 | 350 | 525 |
| 950 | 1,650 | 1,950 | 1,150 | 1,475 | 1,625 | 1,950 |
| 80 | 125 | 225 | 250 | 300 | 250 | 475 |
| 450 | 400 | 350 | 350 | 425 | 525 | 625 |
| 70 | 80 | 75 | 75 | 125 | 175 | 425 |
| 2,410 | 3,525 | 4,360 | 3,575 | 5,050 | 5,395 | 6,600 |
| 225 | 225 | 200 | 200 | 225 | 300 | 450 |
| 2,635 | 3,750 | 4,560 | 3,775 | 5,275 | 5,375 | 7,050 |
| 6,450 | 8,700 | 9,015 | 8,400 | 3,200 | 2,350 | 1,900 |

## SCHEDULE 5 EXPLORATION AND DEVELOPMENT EXPENDITURES -- UNITED STATES -- 1969-1979

*(Excludes Natural Gas Liquids Plants)*

| | 1969 | 1970 | 1971 |
|---|---|---|---|
| | *Million Dollars* | | |
| Lease Acquisitions -- Onshore | 1,125(a) | 150 | 200 |
| Lease Acquisitions -- Offshore | 125 | 950 | 100 |
| Total | 1,250 | 1,100 | 300 |
| Producing Wells | 2,325 | 2,160 | 2,095 |
| Dry Holes | 950 | 850 | 790 |
| Total Capitalized | 4,525 | 4,110 | 3,185 |
| Geological & Geophysical Expense | 575 | 525 | 575 |
| Lease Rentals | 150 | 140 | 140 |
| *Total Exploration & Development Expenditures* | 5,250 | 4,775 | 3,900 |

| | 1972 | 1973 | 1974 | 1975 |
|---|---|---|---|---|
| Lease Acquisitions -- Onshore | 200 | 500 | 700 | 500 |
| Lease Acquisitions -- Offshore | 2,275 | 3,100 | 5,100 | 1,200 |
| Total | 2,475 | 3,600 | 5,800 | 1,700 |
| Producing Wells | 2,330 | 2,705 | 3,975 | 5,515 |
| Dry Holes | 935 | 985 | 1,450 | 1,840 |
| Total Capitalized | 5,740 | 7,290 | 11,225 | 9,055 |
| Geological & Geophysical Expense | 575 | 675 | 925 | 980 |
| Lease Rentals | 165 | 175 | 205 | 215 |
| *Total Exploration & Development Expenditures* | 6,480 | 8,140 | 12,355 | 10,250 |

| | 1976 | 1977 | 1978 | 1979 |
|---|---|---|---|---|
| Lease Acquisitions -- Onshore | 600 | 650 | 700 | 800 |
| Lease Acquisitions -- Offshore | 2,275 | 1,675 | 1,850 | 4,600 |
| Total | 2,875 | 2,325 | 2,550 | 5,400 |
| Producing Wells | 8,055 | 9,645 | 10,875 | 13,600 |
| Dry Holes | 2,205 | 2,885 | 3,900 | 5,150 |
| Total Capitalized | 13,135 | 14,855 | 17,325 | 24,150 |
| Geological & Geophysical Expense | 1,150 | 1,400 | 1,700 | 2,275 |
| Lease Rentals | 225 | 245 | 275 | 325 |
| *Total Exploration & Development Expenditures* | 14,510 | 16,500 | 19,300 | 26,750 |

*(a) Includes Alaska -- North Slope -- $900 Million.*

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